

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 85-35
NPDES NO. CA0038351

REISSUING WASTE DISCHARGE REQUIREMENTS FOR:

Bay Farm Island
Reclamation District 2105
Alameda, Alameda County

The California Regional Water Quality Control Board, San Francisco Bay Region, (hereinafter called the Board) finds that:

1. Reclamation District 2105 (hereinafter discharger) by application dated 3 December, 1984 has applied for reissuance and amendment of waste discharge requirements under the National Pollutant Discharge Elimination System, NPDES Permit No. CA0038351.
2. The discharger presently discharges dry weather flow of 9.5 million gallons per day (mgd) from its lagoon. The discharger proposes to discharge wastes containing pollutants into San Francisco Bay, a water of the United States, at two points.

Waste 001 is approximately 9.5 mgd of lagoon water and surface drainage from land adjacent to the lagoon. The waste would be discharged from the north lagoon structure to San Leandro Channel at the northeast corner of the District's boundry line. During dry weather the waste would consist primarily of lagoon water from a Bay water intake structure on the west shoreline of the District. During wet weather, the discharge would also contain runoff.

Waste 002 is lagoon water and storm runoff water from the west lagoon structure on the Bay shoreline. Discharge would be made from the west lagoon structure to San Francisco Bay only during wet weather, at an average rate of 5 mgd. During dry weather, the structure would be used to take water into the lagoon.

3. The Lagoon water has limited and controlled exchange with San Francisco Bay, and is therefore susceptible to unusually dense biological growth and resulting nuisance conditions. Its release into the Bay is a discharge of pollutants as defined in Section 502 of the Clean Water Act.
4. Applications of biocides, specifically herbicides, may be necessary to prevent nuisance aquatic growths. The application of herbicides constitutes a discharge of pollutants.
5. It is necessary that the discharger demonstrate that a net environmental benefit results from herbicide application in order that the Board may grant permission for routine application to the Lagoon. Application of herbicides on a limited basis may be necessary to determine whether a net environmental benefit will

result from their routine application.

6. Preliminary results of studies being conducted by the discharger indicate that a net environmental benefit may result from herbicide application. A final judgement on the existence of a net environmental benefit will be made by the Board following submission by the discharger of a final report describing these studies.
7. This discharge is presently governed by Waste Discharge Requirements, Order No. 81-2 which allows discharge into San Francisco Bay.
8. The Regional Board adopted a revised Water Quality Control Plan for San Francisco Bay Region (Basin Plan) on July 21, 1982. The Basin Plan contains water quality objectives for San Francisco Bay and contiguous waters.
9. The beneficial uses of San Francisco Bay and contiguous water bodies are:
 - o Water contact recreation
 - o Non-contact water recreation
 - o Wildlife Habitat
 - o Preservation of Rare and Endangered Species
 - o Estuarine Habitat
 - o Fish migration and spawning
 - o Industrial service and process supply
 - o Shellfish harvesting
 - o Navigation
 - o Commercial and Sport Fishing
10. The beneficial uses of Harbor Bay Isle Lagoon are:
 - o Water contact recreation
 - o Non-contact water recreation
 - o Wildlife Habitat
 - o Estuarine Habitat
 - o Fish migration and spawning
 - o Navigation
 - o Commercial and Sport Fishing
11. A Lagoon Management Plan is maintained by the discharger for purposes of providing Lagoon and regulatory personnel with a source of information describing all equipment, facilities, and recommended operating strategies, process control monitoring, and maintenance activities necessary to assure consistent compliance and/or minimize non-compliance. In order to remain a useful and relevant document, this manual should be kept updated to reflect significant changes in plant facilities or activities.
12. This Order serves as an NPDES Permit, reissuance of which is exempt from the provisions of Chapter 3 (commencing with Section 21100) of Division 13 of the Public Resources Code (CEQA) pursuant to Section 13389 of the California Water Code.
13. The discharger and interested agencies and persons have been notified of the Board's intent to reissue requirements for the existing and proposed discharges and have been provided with the opportunity for a public hearing and the opportunity to submit their written views and

recommendations.

14. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED that the discharger in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder and the provisions of the Clean Water Act as amended and regulations and guidelines adopted thereunder shall comply with the following:

A. Discharge Prohibitions:

1. The discharge of any municipal or industrial waste to the Harbor Bay Isle Lagoon is prohibited. The prohibition does not apply for routine urban stormwater runoff.
2. The application of biocides, except as provided in Provision E.3, is prohibited unless it has been demonstrated to the satisfaction of the Regional Board that a net environmental benefit results from their application.

B. Effluent Limitations:

1. The discharge of Wastes 001 or 002 containing constituents in excess of the following limits is prohibited:

Constituent	Units	Instantaneous Maximum
a. BOD	mg/l	20
b. Oil & Grease	mg/l	15

Instantaneous maximum limitations shall be applied to the values of the measurements obtained for any single grab sample.

C. Lagoon Water Limitations (Harbor Bay Isle)

1. The discharger shall provide sufficient circulation through the lagoon to maintain the following limits of quality:
 - a. Chlorophyll 'a' - less than 50 ug/L increase above influent concentration;
 - b. Dissolved oxygen - 5.0 mg/L, minimum;
 - c. The moving median value for the MPN of total coliform in any five (5) consecutive effluent samples shall not exceed 240 coliform organisms per 100 milliliters. Any single sample shall not exceed 1000 MPN/100 mL.
2. The discharger shall provide sufficient circulation through the lagoon to prevent the following conditions at any point in the lagoon:
 - a. Floating, suspended, or deposited macroscopic particulate matter, or foam;
 - b. Significant increase in apparent color beyond natural

background levels in San Francisco Bay/San Leandro Channel;

- c. Aquatic growths in quantities sufficient to create a nuisance condition as defined in the California Water Code;
- d. Visible, floating, suspended, or deposited oil or other products of petroleum origin;
- e. Toxic or other deleterious substances to be present in concentrations or quantities which will cause deleterious effects on aquatic biota, wildlife, or waterfowl, or which render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentration.
- f. Increased turbidity above present natural background levels in San Francisco Bay by more than the following:

<u>San Francisco Bay Background</u>	<u>Incremental Increase</u>
< 50 units (JTU)	5 units, maximum
50 - 100 units	10 units, maximum
> 100 units	10% of background

D. Receiving Water Limitations: (San Francisco Bay/San Leandro Chnl)

- 1. The discharge of waste shall not cause the following conditions to exist in waters of the state at any place:
 - a. Floating, suspended, or deposited macroscopic particulate matter, or foam;
 - b. Significant increase in apparent color beyond natural background levels in San Francisco Bay/San Leandro Channel;
 - c. Aquatic growths in quantities sufficient to create a nuisance condition as defined in the California Water Code;
 - d. Visible, floating, suspended, or deposited oil or other products of petroleum origin;
 - e. Toxic or other deleterious substances to be present in concentrations or quantities which will cause deleterious effects on aquatic biota, wildlife, or waterfowl, or which render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentration.
 - f. Increased turbidity above present natural background levels in San Francisco Bay by more than the following:

San Francisco Bay Background	Incremental Increase
< 50 units (JTU)	5 units, maximum
50 - 100 units	10 units, maximum
> 100 units	10% of background

2. The discharge shall not cause a violation of any applicable water quality standard for receiving waters adopted by the board or the State Water Resources Control Board as required by the Clean Water Act and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Clean Water Act, or amendments thereto, the Board will revise and modify this Order in accordance with such more stringent standards.

E. Provisions:

1. The requirements prescribed by this Order supersede the requirements prescribed by Order Nos. 80-2 and 81-2. Order Nos. 80-2 and 81-2 are hereby rescinded.
2. The discharger shall comply with all sections of this Order immediately upon adoption except as stipulated in Provisions E.4 and E.5 below.
3. Experimental applications of biocides for the control of aquatic weeds are permitted if approved in writing by the Executive Officer prior to herbicide application.
4. To address the issue of net environmental benefit in accordance with Discharge Prohibition A.2, the discharger shall, according to the following schedule:

<u>Task</u>	<u>Date</u>
Submit a draft report describing the effects of biocides on target and non-target organisms to the Executive Officer by	1 August 1985
Submit a final report which is responsive to the Executive Officer's comments on draft report by	1 November 1985

The discharger shall submit to the Board, on or before each compliance report date, a report detailing his compliance or noncompliance with the specific schedule date and task. If noncompliance is being reported, the reasons for such noncompliance shall be stated, the efforts taken to meet compliance, plus an estimate of the date when the discharger will be in compliance. The discharger shall notify the Board by letter when he has returned to compliance with the time schedule.

5. Pursuant to Finding 12, the discharger shall revise the existing Lagoon Management Plan to include the findings of the final report stipulated in Provision E.4. If, based on that report, the Regional

Board finds that a net environmental benefit results from application of selected biocides, then the Lagoon Management Plan may include their regulated use. If the Regional Board finds that a net environmental benefit does not result from their use, then the Lagoon Management Plan shall provide for the control of nuisance weeds without the use of selected biocides. The existing Lagoon Management Plan shall be modified according to the following schedule:

Task	Date
Submit draft revised Lagoon Management Plan to the Executive Officer by	1 March 1986
Submit final revised Lagoon Management Plan which is responsive to the Executive Officer's comments by	1 June 1986

The discharger shall submit to the Board, on or before each compliance report date, a report detailing his compliance or noncompliance with the specific schedule date and task. If noncompliance is being reported, the reasons for such noncompliance shall be stated, the efforts taken to meet compliance, plus an estimate of the date when the discharger will be in compliance. The discharger shall notify the Board by letter when he has returned to compliance with the time schedule.

6. The discharger shall review and update his Lagoon Management Plan annually, or in the event of significant facility or process changes, shortly after such changes have occurred. Annual revisions, or letters stating that no changes are needed shall be submitted to the Regional Board by April 15 of each year beginning 1987.
8. The discharger shall comply with the attached self-monitoring program as adopted by the Board and as may be amended by the Executive Officer.
9. The discharger shall comply with all items of the attached "Standard Provisions, Reporting Requirements and Definitions" dated April 1977 with the exception of Provision A.5.
10. This Order expires April 29, 1990. The discharger must file a report of waste discharge in accordance with Title 23, Chapter 3, Subchapter 9 of the California Administrative Code not later than 180 days in advance of such expiration date as application for issuance of new waste discharge requirements.
11. This Order shall serve as a National Pollutant Discharge Elimination System Permit pursuant to Section 402 of the Clean Water Act or amendments thereto, and shall become effective 10 days after date of its adoption provided the Regional Administrator, Environmental Protection Agency, has no objection. If the Regional Administrator objects to its issuance, the permit shall not become effective until such objection is withdrawn.

I, Roger B. James, Executive Officer, do hereby certify the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region on April 30, 1985.

ROGER B. JAMES
Executive Officer

Attachments:

Standard Provisions & Reporting Requirements, April 1977
Self-Monitoring Program

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

TENTATIVE
SELF-MONITORING PROGRAM
FOR

RECLAMATION DISTRICT NO. 2105

HARBOR BAY ISLE

ALAMEDA, ALAMEDA COUNTY

NPDES NO. CA003851

ORDER NO. 85-35

CONSISTS OF

PART A (Dated 1/78)

AND

PART B

Adopted 18 March, 1975
Revised 30 April, 1985

PART B

I. DESCRIPTION OF SAMPLING STATIONS

A. INTAKE

Station	Description
I-1	At a point in the Lagoon, immediately adjacent to the west lagoon structure (#2)

B. EFFLUENT

Station	Description
E-001	At a point in the lagoon, immediately adjacent to the north lagoon structure (#1)
E-002	At a point in the lagoon, immediately adjacent to the west lagoon structure (#2)

C. LAGOON WATER

Station	Description
LG-1 thru LG-2	At the approximate center line points in the lagoon shown in the attached sketch entitled "Bay Farm Island Lagoon Sampling Stations."

D. RECEIVING WATERS

Station	Description
C-1	At a point in San Leandro Channel, located approximately 25 feet north of the point at which waste 001 is discharged.
C-1-RW C-1-RE	At one point in the San Leandro Channel, 200 feet either westerly or easterly from the north (#1) lagoon structure and "upstream" from the lagoon structure depending upon tidal conditions (e.g. C-1-RW on flood and C-1-RE on ebb).

II. SCHEDULE OF SAMPLING, MEASUREMENT, AND ANALYSIS

- A. The schedule of sampling and analysis shall be that given as Table I. Grab samples of intake shall be collected during periods of maximum peak flows.

III. MODIFICATION OF PART "A" DATED JANUARY 1978

- A. Does not include the following paragraphs of Part A:
C.1, C.3, C.4, C.5.d, C.5.e, D.1, D.2.a, D.3.a, D.4, E, F.3.g.
- B. Includes the following modification of paragraph F.3.c:
Effluent data summary will be sent to the Regional Board only.

I, Roger B. James, Executive Officer, hereby certify that the foregoing Self-Monitoring Program Program:

1. Has been developed in accordance with the procedure set forth in this Regional Board's Resolution 73-16 in order to obtain data and document compliance with waste discharge requirements adopted in Regional Board Order No. 85-35.
2. Is effective 30 April, 1985.
3. May be reviewed at any time subsequent to the effective date upon written notice from the Executive Officer or request from the discharger and revisions will be ordered by the Executive Officer.

Roger B. James
Executive Officer

Attachments
Table I
Sketch

TABLE I

SCHEDULE OF SAMPLING, MEASUREMENTS, AND ANALYSIS

SELF-MONITORING PROGRAM - NEDES # 0038351
 ORDER # 85-35

SAMPLING STATIONS	I-1	E-001	LG (1)	C (2)				
Type of Sample	G	G	G	G				
Flow Rate (mgd)	D	D						
BOD ₅ (mg/l)		M						
Oil & Grease (mg/l)		M						
pH (units)	M	M ⁽³⁾	M					
Chlorophyll 'a' (mg/l)	M ⁽³⁾		/3 M					
Dissolved Oxygen (mg/l)			(3) M					
Temperature (°C)			M					
Turbidity (Turbidity Units)	W	W	M	M				
Total Coliform (MPN/100 ml)			(3) M					
All Applicable Standard Observations		W	M	M				

FOOTNOTES:

- (1) Samples of lagoon water shall be collected on days coincident with sampling of intake water.
- (2) To be sampled while discharge from the lagoon is occurring.
- (3) Weekly from June through September.

LEGEND FOR TABLE

G = grab sample
 I = intake station
 E = waste effluent stations
 C = receiving water stations
 LG = lagoon stations

D = once each day
 W = once each week
 M = once each month



C-1 (25'N)

SAN LEANDRO CHANNEL

E-001

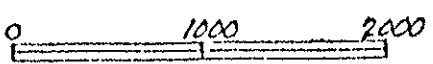
LG-3

LG-2

I-1

RECLAMATION
DISTRICT
BOUNDARY

SAN FRANCISCO BAY



GRAPHIC SCALE IN FEET

STATE OF CALIFORNIA
REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

BAY FARM ISLAND / HARBOR BAY ISLE
LAGOON MONITORING
PLAN

DRAWN BY:	DATE: 4/23/85	DRAWN BY:
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